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• Short Report

The use of self-Reiki for stress reduction and relaxation

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ABSTRACT

OBJECTIVE: More than one-third of college students reported the desire for stress reduction techniques and education. The purpose of this study was to determine the effects of a 20-week structured self-Reiki program on stress reduction and relaxation in college students.

METHODS: Students were recruited from Stockton University and sessions were conducted in the privacy of their residence. Twenty students completed the entire study consisting of 20 weeks of self-Reiki done twice weekly. Each participant completed a Reiki Baseline Credibility Scale, a Reiki Expectancy Scale, and a Perceived Stress Scale (PSS) after acceptance into the study. The PSS was completed every four weeks once the interventions were initiated. A global assessment questionnaire was completed at the end of the study. Logs summarizing the outcome of each session were submitted at the end of the study.

RESULTS: With the exception of three participants, participants believed that Reiki is a credible technique for reducing stress levels. Except for two participants, participants agreed that Reiki would be effective in reducing stress levels. All participants experienced stress within the month prior to completing the initial PSS. There was a significant reduction in stress levels from pre-study to post-study. There was a correlation between self-rating of improvement and final PSS scores. With one exception, stress levels at 20 weeks did not return to pre-study stress levels.

CONCLUSION: This study supports the hypothesis that the calming effect of Reiki may be achieved through the use of self-Reiki.

Keywords: self-Reiki; therapeutic touch; stress; relaxation

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1 Introduction

Reiki is a Japanese system of energy healing that has been used for over 2 500 years. It involves the transfer of energy from the practitioner to the receiver, which promotes healing, and can be done by either contact or non-contact methods. Both the receiver and the practitioner may feel the energy in various forms (warmth, cold, tingling, vibration, pulsations and/or floating sensations). Reiki can also be self-administered if one is a Reiki practitioner. Reiki is mainly used to address stress, anxiety, and pain

reduction while also promoting a sense of well-being and improving quality of life^[1–10].

College students are subject to multiple stressors including ones that are academic, financial, housing, and peer-related in nature^[8,9]. Students with high levels of stress identify themselves as less healthy, are more prone to having poor health habits, and report lower levels of self-esteem^[11]. More than one-third of college students report the desire for stress reduction techniques and education^[12]. The popularity of complementary and alternative medicine (CAM) therapies used among Americans is steadily increasing in all major

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sociodemographic groups^[13]. Anxiety, fatigue, and stress related issues are cited as main reasons for CAM implementation^[14].

There has been one published doctoral dissertation^[15] on the effects of self-Reiki to reduce stress among nurses. However, there are no studies involving its use in college students. Reiki techniques may prove useful in increasing community awareness and understanding the determinants of health and disease (part of the mission and overarching goals of Healthy Campus 2020^[16]).

The purpose of this study was to determine the effects of a 20-week structured self-Reiki program on the quality of life (stress reduction and relaxation) in college students. The hypothesis was that self-Reiki would decrease stress levels and promote relaxation in college students.

2 Materials and methods

2.1 Methods

Prior to recruiting students at Stockton University, New Jersey, USA, this study was approved by the university's internal review board. Inclusion criteria were: currently registered full time or part time student, at least 18 years of age, no known uncontrolled physical or mental illness, no known physical or mental illness that could interfere with the subject's ability to participate in the study, the ability to read and understand English, and the ability to complete Reiki Level I training. Exclusion criteria included the following: not a currently registered student, less than 18 years of age, known uncontrolled physical or mental illness, known physical or mental illness that could interfere with the subject's ability to participate in the study, unable to read and understand English, and unable to complete Reiki Level I training.

Participants completed an informed consent and were screened by a physical therapist via a series of questions. The purpose of the screening was to rule out any known uncontrolled physical or mental illness and any physical or mental illness (such as active chemotherapy treatment or diagnosis of bipolar disease) that could affect stress or mood beyond levels of normal activity, and to assess current stress management methods. Once accepted into the study, participants completed a Reiki Baselines Credibility Scale (RBCS), a Reiki Expectancy Scale (RES), and a Perceived Stress Scale (PSS-10). Participants were asked to attend a Reiki Level I training session to learn the self-Reiki techniques. This was presented over two-day, lasting 2–3 h per day, after the conclusion of the students' spring 2014 semester. The training session included a historical perspective of Reiki and its uses, published research findings on the use of Reiki, a Level I attunement, the meaning, use, and practice of the Kanji hand positions, and the practice of the hand positions for

performing Reiki on individuals and hand positions for performing self-Reiki. Each participant received a certificate of completion of Reiki Level I training at the conclusion of the training session. Participants were asked to not begin any new stress management techniques, but to maintain any current techniques they already used, along with continuing their normal activities. After Reiki Level I training was completed, participants performed self-Reiki bi-weekly lasting 20 min over the course of 20 weeks during the summer and fall 2014 semesters. At 4, 8, 12, 16, and 20 weeks of intervention, participants completed the PSS-10. At the end of the 20 weeks participants also completed a global assessment questionnaire (GAQ). Participants kept a log throughout the study, recording any significant events (*i.e.*, perceived change in levels of stress or emotional state or perceived change in stress situations) during each session.

2.2 Materials

The PSS-10 is a valid and reliable 10-item self-report questionnaire that measures a person's stress situations in the past month. It is designed for those with at least a junior high school education. Scores are obtained by reversing the scores on 4 positive items (items 4, 5, 7 and 8) and then summing across all 10 items. Scores range from 0 to 40 with higher scores indicating greater stress. There are no cut-offs as the PSS-10 is not a diagnostic instrument. The RBCS and the RES are self-administered questionnaires designed to measure participant expectation of the Reiki treatment. The RBCS was adapted from a credibility scale designed to measure the participant's perception of acupuncture treatment^[17] and analogue therapy rationales^[18]. The RES was adapted from an acupuncture expectancy scale^[19]. The internal consistency of the scale (Cronbach's alpha coefficient) was 0.82. Expectancy of response was positively correlated with perceived efficacy (0.44), satisfaction (0.49), and confidence in perceived therapy (0.51), all with $P < 0.001$.

Although there are valid and reliable tools designed to measure quality of life (QOL), they may not be sensitive to measuring changes in QOL over time, or assessing changes in perceptions of QOL. A global evaluation of an intervention is a reasonable assessment of the participant's perspective of change. They have been used to assess a clinically important change over time in other measures by a comparison of the calculated change to the measured transition value^[20]. Global evaluations of the effects of an intervention reflect not only the magnitude of the changes in these outcomes and feelings about intervention delivery, but also the personal importance that these outcomes have for participants^[21].

2.3 Statistical analysis

Data were analyzed using the SPSS 17.0 statistical program. A paired *t*-test was performed for each measure comparing



the change from baseline to each time interval, and from one time period to the next. All primary analyses were done using intention-to-treat principles with last observation carried forward to account for missing data.

3 Results

3.1 Participant demographics

Thirty-two individuals inquired about the study, and 30 consented to participate and completed the initial screening, RBCS, RES, and PSS-10. Twenty-eight participants completed the Reiki Level I training and 20 completed the entire study. Withdrawals occurred at the 4-, 8-, and 12-week marks resulting in a 33.3% withdrawal rate. Of the 20 completing the study, five were males and 15 were females. Ages ranged from 18–25 years with a mean of 21.35 years, median of 20 years, and a mode of 22 years.

3.2 Stress, credibility, and expectancy responses

PSS-10, RBCS, and RES were completed after the initial screening and prior to interventions. PSS-10 was completed at the end of the 4, 8, 12, 16, and 20 weeks of intervention. The GAQ was completed at the end of 20 weeks of intervention. Completed logs were submitted at this time as well.

Scores for the RBCS ranged from 3 to 6 with a mean of 4.67 and a standard deviation of 0.885; scores for the RES ranged from 2.75 to 4.75 with a mean of 3.72 and a standard deviation of 0.637. The higher the score, the more the individual agreed to the credibility of Reiki and that Reiki would have an effect in decreasing stress levels. PSS-10 results for the pre-study, 4-, 8-, 12-, 16-, and 20-week data collection are reported in Table 1. Scores could range from 0 to 40, with a higher score indicating more stress. Pre-study PSS-10 scores were compared to PSS-10 scores at various intervals during the study. There was a significant decrease in stress levels from pre-study to each subsequent collection of PSS-10 scores. There was also a significant decrease from week 4 to 8 and week 4 to 16.

3.3 Global assessment responses

Results for the GAQ indicated a range of 2 to 5, with a

mean of 4.4, median of 5, mode of 5, and a standard deviation of 8.655. A higher score indicated participant agreement with improvement in stress. There was a range of –3 to 32, with a mean of 14.6, median of 15.5, mode of 16.0, and a standard deviation of 8.441 when comparing the initial PSS-10 scores to the 20-week scores. A greater point difference indicated greater reduction in stress levels. A negative number reflects one participant’s stress levels increasing.

When global assessment was compared to PSS-10 at week 20 there was a correlation that was significant at the 0.01 level. See Table 2. A higher global assessment score indicated the individual’s higher agreement that there was an improvement in stress reduction. The lower the PSS-10 score corresponded to a lower level of stress experienced by the individual. The log entries followed common themes that supported this correlation. Common themes included: a more calm perspective of stress situations; the ability to keep calm and relaxed; good physical and mental health. Entries also documented feeling more peaceful after Reiki sessions, having an easier time falling asleep at night, and feeling more energized and calm. The log entries of the participant who experienced increased stress levels during the study reflected adverse personal and/or family events at the times that stress levels increased.

4 Discussion

With the exception of three participants, participants believed that Reiki is a credible technique for reducing stress levels. Except for two participants, participants agreed that Reiki would be effective in reducing stress levels. All participants experienced stress within the month prior to completing the initial PSS.

There was a significant reduction in stress levels from pre-study to post-study. On average there was a 14.6 point reduction in PSS-10 scores from pre- to post-study values. When comparing PSS-10 scores at 4 weeks to each of the subsequent score collections, there was a significant reduction in stress levels at weeks 8 and 16. When comparing PSS-10 scores at week 8 to each of the subsequent

Table 1 PSS data and significance levels of PSS-10 changes

Data	Pre-study*	4 weeks**	8 weeks	12 weeks	16 weeks	20 weeks
Range	16 to 37	5 to 27	3 to 24	0 to 25	3 to 22	4 to 28
Mean	26.10	14.90	11.70	12.65	11.00	12.00
Median	25.50	15.50	10.50	11.50	17.50	12.00
Mode	37, 22, 19	11.00	9.00	12, 11	13, 10	5.00
Standard deviation	6.55	5.77	5.65	6.43	5.77	7.39

*Pre-study compared to all subsequent data collections = 0.000 level of significance; **4 weeks compared to 8 & 16-week data collections = 0.003 and 0.041 levels of significance, respectively. PSS: Perceived Stress Scale.

Table 2 GAQ data and differences in PSS scores at 4 and 20 weeks

Data	GAQ	Difference between PSS at 4 and 20 weeks
Range	2 to 5	-3 to 32
Mean	4.4	14.6
Median	5	15.5
Mode	5	16.0
Standard deviation	8.655	8.441

Higher score indicated participant agreement with improvement in stress; greater point difference indicated greater reduction in stress levels. A negative number reflected increased stress levels. GAQ: global assessment questionnaire; PSS: Perceived Stress Scale.

score collections there was no significant reduction in stress levels, which was also consistent with comparisons at week 12, and comparing scores at 16 to 20 weeks. The greatest reduction of stress levels occurred during the first four weeks.

There was a correlation of self-rating of improvement with final PSS-10 scores. Participants who reported improvement demonstrated decreased stress levels. It should be noted that participants who reported no improvement or only slight increase in stress levels demonstrated decreased stress levels based on their PSS-10 scores. With one exception, stress levels at 20 weeks did not return to pre-study stress levels.

Plodek^[15] studied the effects of self-Reiki to reduce perceived stress among nurses. In addition to the PSS-10, salivary cortisol samples were collected, as well as daily practice logs and qualitative focus group interviews. With a small sample size of 22, the findings of the Plodek study were inconclusive. The quantitative findings did not support the study hypothesis that Reiki would reduce stress. The qualitative findings of the focus groups demonstrated a decrease in perceived stress and a decrease in physical symptoms such as palpitations and an increase in relaxation. Compared to Plodek, this current study did find that both quantitative and qualitative findings supported the hypothesis that self-Reiki would reduce stress and improve QOL.

Limitations of this study included the sample size of 20 who completed the study. A larger sample size may have yielded different outcome measures. There was no comparison to a control group or to other techniques for stress reduction. Future studies should examine the effect of Reiki when self-administered compared to Reiki administered by a Reiki practitioner, examine the long term effects of four weeks of self-Reiki at different intervals without additional self-Reiki, and compare self-Reiki to other self-administered CAM techniques.

5 Conclusion

Reiki may be a way of increasing campus community awareness and understanding regarding the determinants of health and disease^[16]. Reiki may also be a way of promoting QOL, healthy development, and healthy behaviors^[22]. This study supports the hypothesis that the calming effect of Reiki may be achieved through the use of self-Reiki. Self-Reiki is one potential stress-management method that is applicable to college students.

6 Competing interests

The author declares no competing interests.

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Submission Guide

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